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EXAMINER

DAO, THUY CHAN

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2192

DATE MAILED: 01/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/064,751	<b>Applicant(s)</b> KONDO, GO	
	<b>Examiner</b> Thuy Dao	<b>Art Unit</b> 2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/24/02, 10/17/05</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. This action is responsive to the application filed on August 13, 2002.
2. Claims 1-14 have been examined. Claims 1, 6, 7, 11, and 12 are independent claims.

### **Priority**

3. The application claims priority under a Foreign Application No. 2001-246290 (JP) filed on August 14, 2001. The priority date considered for this application is August 14, 2001.

### **Information Disclosure Statement**

4. The Office acknowledges receipt of the Information Disclosure Statement filed on October 24, 2002 and October 17, 2005. They have been placed in the application file and the information referred to therein has been considered by the examiner.

### **Oath / Declaration**

5. The Office acknowledges receipt of a properly signed oath/declaration filed on October 24, 2002.

### **Drawings**

6. Figures 36-39 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated (Specification, pages 1-6). See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### **Specification**

7. The disclosure is objected to because of the following informalities: page 12, [092], line 4, the word "concerting" is misspelled.

Appropriate correction is required.

### **Double Patenting**

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1, 6, and 12 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3, 9, 13 and 21 of U.S. Patent No. 6,745,208 (hereinafter "'208"). Although the conflicting claims are not identical, they

are not patentably distinct from each other because the claims are all directed to a method and apparatus for synchronizing a source model with a target model by model converter (instant application) or an object mapping mechanism ('208) and automatically transferring updates using an event generator (instant application) or an adapter software module ('208).

Instant Application	US Patent No. 6,745,208
<p>Claim 1:</p> <ul style="list-style-type: none"><li>• an application editing apparatus;</li><li>• first and second models and two corresponding views;</li><li>• editing module editing first model;</li><li>• model converter;</li><li>• dynamically updating an edit made in first model and reflecting said edit in the second model and view.</li></ul>	<p>Claim 9 (dependent on claim 1):</p> <ul style="list-style-type: none"><li>• editor software application in a computer apparatus;</li><li>• first and second models and two corresponding views;</li><li>• creation/change in first model;</li><li>• object mapping mechanism;</li><li>• responsive to a creation or change, dynamically reflecting the changes into the corresponding views.</li></ul>
<p>Claim 6:</p> <ul style="list-style-type: none"><li>• an application editing apparatus;</li><li>• first and second models and two corresponding views;</li><li>• editing module editing first model;</li><li>• model converter;</li><li>• event converter;</li><li>• dynamically updating an edit made in first model and reflecting said edit in the second model and view.</li></ul>	<p>Claim 3 (with claim chain 3→2→1):</p> <ul style="list-style-type: none"><li>• software application in a computer apparatus;</li><li>• first and second models and two corresponding views;</li><li>• creation/change in first model;</li><li>• object mapping mechanism;</li><li>• adapter software modules;</li><li>• responsive to a creation or change, dynamically reflecting the changes into the corresponding views.</li></ul>

Claim 12 (a program version of the apparatus claim 1).	Claim 21 (dependent on claim 13, a program embodied in a computer readable product).
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### Claim Rejections – 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art of pages 1-6 of applicant's background (hereafter "APA"), in view of US Patent No. 6,792,431 to Tamboli et al. (hereinafter "Tamboli").

#### Claim 1:

APA discloses an apparatus/program (FIG. 39 and [004-034]) and *an application editing apparatus for using a computer to edit an application having a model and a view separated from each other (e.g., FIG. 39), comprising:*

*an editing module for editing a first model in said application (e.g., page 4, [026], "... Examples of such an editor including a model converter function are XML writer available from Wattle Software and Excelon Stylus available from eXcelon. These editors display a source model in a source code view (source view) for editing...");*

*a model converter for converting the first model edited by said editing module into a second model (also page 4, [026], "Furthermore, a model converter is not only used by itself but also included in an editor for generating a preview model"); and*

*a view display module for using a view of said second model to display said second model on a display device (page 4, [026], "In response to this operation, a model converter included in the editor converts the entire source model into a new model to update the preview, which is a view of the converted model");*

*wherein said view display module comprises an explicit operation based on an update in said second model if said second model is updated based on an edit of said first model made by said editing module and changes the view displayed on said display device based on said explicit operation (e.g., page 5, [031], "... Instead, a user should explicitly request an update of the target to convert the entire source model into the target model-view pair").*

*APA does not explicitly disclose an event generator for generating an event based on an update in said second model if said second model is updated based on an edit of said first model made by said editing module.*

However, in an analogous art of data integration through a dynamic common model, Tamboli discloses an event generator for generating an event based on an update in said second model if said second model is updated based on an edit of said first model made by said editing module (e.g., col.4: 15-26, "In contrast, the dynamic common model itself comprises elements useful for automatically upgrading the dynamic common model to include changes in source repository structures. In fact, changes typically are administered in a similar manner as additions of new repositories. "Automatic upgrading" in this sense means that upon activation, a new adapter automatically registers itself and its new repository with a data integration application to which it is coupled for data communications and a spider then automatically enters in a catalog identifying information for all the records in the new repository served by the new adapter" (emphasis added) ).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the teachings of APA (source/target model editing apparatus without automatically updating process) with that of Tamboli (automatically updating process). One would have been motivated to overcome the existing problem of the static models as well as enhance the combined system as suggested by Tamboli (e.g., col.2: 1-11, "One problem is that the standard data model utilizes a completely static standard structure. That is, there is no method or system within the standard model for giving effect to routine changes in source system data structures. After the structure of a standard model is standardized by an industry standards committee (or a

local data management group), the standard model structure is locked in place until changed by the committee”; and col.2: 32 – col.4: 31).

**Claim 2:**

The rejection of base claim 1 is incorporated. Tamboli further discloses *said view display module further comprises:*

*a difference extractor for extracting a difference between said second models before and after an update if said second model is updated based on an edit of said first model made by said editing module (e.g., col.11: 42-48, “In typical embodiments, the extract routines in adapters for repositories with update time stamps are capable of accepting a last-spider time from a calling routine in a spider and extracting only those repository records having time stamps that indicate updates after the last-spider time for the particular repository”); and*

*said event generator generates said event by using information about said difference extracted by said difference extractor as a parameter (e.g., col.11: 63-65, “ In typical embodiments, spiders can accept as parameters the last-update time for a repository and an identification of the repository to be spidered” (emphasis added) ).*

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the teachings of APA (updating the whole repository without any parameter and per an explicit operation as set forth in claim 1 above) with that of Tamboli (only transferring the updated data to the target based on a parameter as the last-update time stamp). One would have been motivated to avoid updating the whole repository if not necessary as suggested by Tamboli (e.g., col.11: 48-51, “Extract routines in adapters for repositories without update time stamps typically upon request from a spider's calling routine extract the entire source repository each time the source repository is spidered”; and col.12: 3-12).

**Claim 3:**

The rejection of base claim 1 is incorporated. APA also discloses *said model converter converts an individual element of said first model into a corresponding*



*element of said second model* (e.g., FIG. 39, Models B - C, and related text page 3, [021]).

**Claim 4:**

The rejection of base claim 1 is incorporated. APA also discloses *if said second model contains no element corresponding to a converted element of said first model, said model converter adds an element corresponding to said converted element to said second model* (e.g., FIG. 39, Models A – B, and related text page 3, [021]).

**Claim 5:**

The rejection of base claim 1 is incorporated. APA also discloses *said model converter converts an element edited by said editing module in said first model into a corresponding element in second model and updates said second model with said converted element* (e.g., pages 3-4, [023-025]).

**Claim 6:**

Claim 6 is an apparatus version, which recites the same limitations as those of the claims 1, 3, and 5, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the references teach all of the limitations of claims 1, 3, and 5, they also teach all of the limitations of claim 6.

**Claim 7:**

APA discloses a data processing method of using a computer to display a model in a given application in a view in another application, comprising the steps of: updating a second model so that the update is reflected in said second model if a first model in said given application is updated; and generating an explicit operation based on the update made to said second model and, based on said operation, changing the view displayed on a display device in said another application (e.g., FIG. 39 and related text in pages 3-6, [020-034]).

APA does not explicitly disclose:

*reading a second model in said another application from a data storage storing said given application;*

*generating an event based on the update made to said second model.*

However, in an analogous art of data integration through a dynamic common model, Tamboli discloses:

reading a second model in said another application from a data storage storing said given application (e.g., col.12: 18-42; FIG. 5 and col.6: 59 – col.18: 38; and col.23: 7-8);

generating an event based on the update made to said second model (e.g., col.4: 15-26).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the teachings of APA and Tamboli. One would have been motivated to overcome the existing problem of the static models as well as enhance the combined system as suggested by Tamboli (e.g., col.2: 1-11; and col.2: 32 – col.4: 31).

#### **Claim 8:**

The rejection of base claim 7 is incorporated. Claim 8 is a method version, which recites the same limitations as those of claim 2, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the references teach all of the limitations of claim 2, they also teach all of the limitations of claim 8.

#### **Claim 9:**

The rejection of intervening claim 8 is incorporated. APA also discloses said step of updating said second model comprises the step of converting elements of said first model into a corresponding elements of said second model, and said step of changing the view in said another application comprises the step of updating the converted elements of said second models (e.g., FIG. 39 and related text in pages 3-6, [020-034]).

APA does not explicitly discloses *the step of converting an individual element of said first model into a corresponding element of said second model, and the step of*

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*extracting a difference in the individual converted element of said second models before and after the update.*

However, Tamboli further discloses the step of converting an individual element of said first model into a corresponding element of said second model, and the step of extracting a difference in the individual converted element of said second models before and after the update (e.g., col.11: 42-48, "In typical embodiments, the extract routines in adapters for repositories with update time stamps are capable of accepting a last-spider time from a calling routine in a spider and extracting only those repository records having time stamps that indicate updates after the last-spider time for the particular repository"); and

FIG. 1, col.13: 36-48, "The transfer manager in a typical embodiment then calls (222) an insert routine in the destination adapter serving the destination repository (134). The destination adapter converts the common format to native format by calling a transformation service. After transformation the destination adapter inserts (125) the transfer data into the destination repository (134), returning to the transfer manager new identifying attributes and proxy data for the newly inserted record in the destination repository (220). If the insertion was successful, so that the destination now contains data it did not contain before the transfer, the transfer manager updates (236) the catalog by calling (237) an insert routine in an adapter for the catalog...").

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the teachings of APA (updating the whole repository without any parameter and per an explicit operation as set forth above) with that of Tamboli (only converting and transferring the updated data to the target based on a parameter as the last-update time stamp). One would have been motivated to avoid updating the whole repository if not necessary as suggested by Tamboli (e.g., col.11: 48-51).

#### **Claim 10:**

The rejection of base claim 7 is incorporated. APA also discloses

an event causing the update made to said first model to be reflected in a view in said given application (e.g., FIG. 36 and page 2, [006], "If a change is made to the model through a certain view in the application, the change is reflected in the other views")

step of converting said event into an event changing the view in said another application by using a conversion rule for converting said first model into said second model by an explicit operation (e.g., FIG. 39 and pages 3-6, [020-034]).

As set forth in claim 7 above, Tamboli discloses *generating an event based on the update made to said second model and, based on said event, changing the view displayed on a display device in said another application.*

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the teachings of APA (automatically reflecting updates between model and corresponding views) with that of Tamboli (automatically reflecting updates between models and model/view) by comprising the step of converting an event causing the update made to said first model to be reflected in a view in said given application into an event changing the view in said another application by using a conversion rule for converting said first model into said second model. One would have been motivated to overcome the existing problems in the prior art (e.g., col.2: 1-25) as well as enhance the combined system as suggested by Tamboli (e.g., col.2: 32 – col.4: 31).

**Claim 11:**

Claim 11 is a program version, which recites the same limitations as those of claims 7 and 8, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the references teach all of the limitations of claims 7 and 8, they also teach all of the limitations of claim 11.

**Claims 12-14:**

Claims 12-14 are also program versions, which recite the same limitations as those of claims 1-3, wherein all claimed limitations have been addressed and/or set

forth above. Therefore, as the references teach all of the limitations of claims 1-3, they also teach all of the limitations of claims 12-14.

### **Conclusion**

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US Patent No. 6,745,208 discloses prior art XML editor programs and Meta-Object Facility (MOF) specification from World Wide Web Consortium (W3C).

US Patent No. 6,635,089 discloses method for producing composite XML document object model trees using dynamic data retrievals.

US Patent No. 6,915,304 and 6,732,095 disclose method and system for converting/mapping an XML data structure into and relational database.

US Patent No. 6,826,579 discloses generating event-condition-action rules from process models.

US Patent No. 6,611,838 discloses metadata exchange translating metadata in a source format to a model format.

US Patent No. 5,315,709 discloses method and apparatus for transforming objects in data models.

13. Any inquiry concerning this communication should be directed to examiner Thuy Dao (Twee), whose telephone is (571) 272 8570. The examiner can normally be reached on Monday – Friday from 6:00AM to 3:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached at (571) 272 3695.


The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is (571) 272 2100.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T. Dao



TUAN DAM  
SUPERVISORY PATENT EXAMINER